TACOBEL.022A   PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	:	Eric Rose
Appl. No.	:	09/836,855
Filed	:	April 16, 2001
For	:	METHODS AND APPARATUS FOR VOICE ACTIVATED AUDIBLE ORDER SYSTEM
Examiner	:	Rajesh Khattar
Group Art Unit	:	3627

DECLARATION OF ERIC ROSE PURSUANT TO 37 C.F.R. § 1.131

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This declaration is to establish a date of conception at least as early as March 12, 2000 for embodiments claimed in the above captioned patent application.

I, Eric Rose, do declare as follows:

1.   I have reviewed the pending claims of the above captioned patent application, and I am the inventor of the subject matter recited in the pending claims.

2.   Attached as Exhibit A is a true and correct copy of one page of written description and two pages of drawings that I prepared as an employee of Taco Bell Corp. The document is dated March 12, 2000 and is reflective of the subject matter that I conceived at least as early as that date.

3.   As set forth in Exhibit A, I conceived of a voice activated audible ordering system for a fast food restaurant. The system includes a point-of-sale (POS) register in which food orders are entered. The system also includes a voice operated order module that includes a memory, a text-to-speech synthesizer for converting the POS entries into audible speech, and a speech-to-text circuit for recognizing and converting voice commands into control signals. The order module additionally includes a microphone and a headphone. The microphone and

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headphone are connected to the order module through a wireless link to "allow the operator to be physically located anywhere on the production line without being required to go to a 'home base' to get the next item ordered." The computer memory coupled to the POS register can store a plurality of orders entered into the POS register.

4.   As set forth in Exhibit A, the audible ordering system that I conceived further includes "optional middleware" connected between the POS register and the audible order module. The "optional middleware" can interpret POS information and route that information to an appropriate order module. For example, the "optional middleware" can send a first portion of a food order to a first food preparer worker in response to a voice command and can divert a second portion of the food order different from the first portion to a second food preparer worker. Similarly, the "optional middleware" can send a portion of a first food order to a first food worker and a portion of a second food order to a second food worker. The system is configured to allow a restaurant worker to speak an audible command into a microphone and receive "over the same headset which initiated the command" an audible voice reciting a specific item or items in accordance with the command. The system further includes an intelligence circuit that is responsive to spoken commands to go back to a previous stored order or to advance to a subsequently stored order. That allows the operator to have an item repeated or move backward and forward through the list.

5.   As found in Exhibit A, I also conceived of an order method for a fast food restaurant. The method includes entering food orders into a POS register and temporarily storing the food orders as digital data. The method further includes having a food preparer worker speak an audible command into a microphone and recognizing the command to connect it into a control signal. The signal is used to initiate converting stored digital data relating to a food order into synthesized speech. The signal, for example, can cause a first stored order to be supplied to a speech synthesizer. The order information is audibly transmitted to the same worker who initiated the command.

6.   From March 12, 2000 until my patent application was filed on April 14, 2000, my attorneys and I worked diligently to prepare the patent application for my invention.

7.   I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these

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statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both (18 U.S.C. 1001) and may jeopardize the validity of the application or any patent issuing thereon.

Dated: 9/21/07   By:

                                                                   Eric Rose

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Exhibit A

Voice Operated Audible Order System

Abstract:

The Voice Operated Audible Order System is an interface that translates text based order information from a Point of Sale (POS) device into an audible list using either a pre-recorded voice or an off-the-shelf voice generator. The list is held in computer memory and is parsed through by an operator on a full duplex wireless headset using verbal commands. As the command for the next order is given, the computer replies by transmitting over the wireless system the next item ordered, including quantity. The operator can have the item repeated or move backward and forward through the list. The system will allow the operator to be physically located anywhere on the production line without being required to go to a "home base" to get the next item ordered that must be prepared or built.

Background of the Invention:

The present invention replaces a monitor currently mounted in a fixed location. The orders are placed on the monitor in a FIFO basis, with longer words abbreviated to fit. The monitor's fixed position requires the operator to be in a "home" position in order to view it. The abbreviations cause confusion to new employees. The orders on the monitor that are in the queue provide extra information that is not pertinent to the order at hand except to tell the operator that more work is coming. The invention allows the operator to overcome all these issues which should increase their productivity. The wasted activity of going to "home" position, viewing the monitor, finding the last entry read, interpreting abbreviation and then bumping the order off the screen when completed are eliminated.

Summary of the Invention:

The Voice Operated Audible Order System will interpret voice commands from a user to parse through a memory file. The memory file is filled with quantity and order information that is sent over a network in condensed fashion. The module translates this information and coverts it to speech, which is in turn sent over RF to the user.

Brief Description of the Drawings:

FIG. 1 is a block diagram of Voice Operated Audible Order Module connected to the Point of Sale (POS) and the RF system. The optional "middleware" may pre-interpret where the POS signal goes.

FIG. 2 is a block diagram of the Voice Operated Audible Order System. The POS information goes into memory. The intelligence selects which order item to convert from text to speech and transmit to the operator based on the voice command from the operator after it has been translated into text. The translation table changes the abbreviated information into usable language.

FIG. 3 is a block diagram of the memory. The POS information goes into the next available memory slot, overwriting old information in a circular fashion as the memory overfills. The memory is parsed using the selector.

Detailed Description of the Invention:

For a better understanding of the invention, the voice operated audible order system will be described below. Orders are entered into a POS system (Figure 1). The order is sent over a network and stored in the Audible Order Module Memory (Figure 2). The operator or user who assembles the order speaks a voice command into the microphone which is sent via RF to the receiver. The command then goes to a speech to text converter (Figure 2), which can then be interpreted by the intelligence. The intelligence is basically allowing the user to parse through the memory (Figure 3) by moving a pointer to the item the user wants to hear. This item is then sent to the translator (Figure 2) where the compressed information is expanded. This expanded information is then sent to the text to speech converter before being transmitted to the user over the same headset which initiated the command.

Figure 1

Figure 2

Figure 3